

NEOUS IP MATRIX CONTROLLER

The Neous Controller is the central control and security manager of the Neous Multi-Domain IP Matrix, defining and enforcing user and source permissions, mapping connections between endpoints, and securely distributing encryption keys across the network.



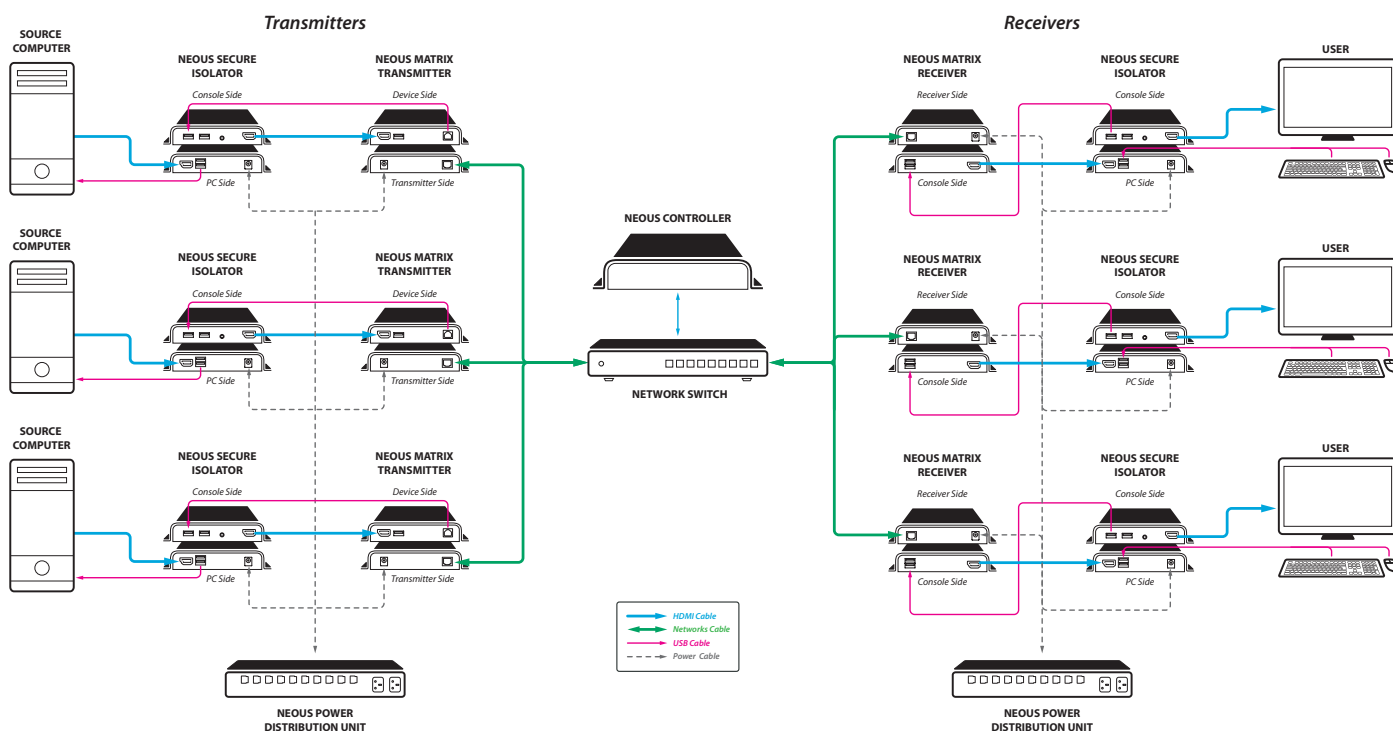
The IP Matrix provides a standards-based, secure Video and KVM-over-IP framework that enables flexible, many-to-many connectivity between source computers and user workstations, with the controller acting as the

single point of control to support scalable expansion, centralized policy enforcement, and secure operation with zero latency.

KEY FEATURES

- **Matrix Management:** Oversee the connections between every Transmitter and Receiver Endpoint of the Neous Multi-Domain IP Matrix.
- **Scalable Connectivity:** Manage up to 150 Transmitter and Receiver Endpoints simultaneously. Cascading multiple Controllers together can scale the IP Matrix.
- **Source/User Management:** Identify, register, and define the permissions of each Transmitter and Receiver, ensuring every source and user is only allowed to connect to other endpoints according to their permission classification.
- **Encryption Key Management:** Distribute AES 256 encryption keys between Endpoints to maintain secure connections between Transmitters and Receivers.
- **Zero-Latency Switching:** Connect, disconnect, and switch Transmitters and Receivers instantaneously.
- **Power over Ethernet:** (Optional) Provide power to connected Transmitters or Receivers over the Ethernet cable.
- **UHD Multi-Viewing Capabilities*:** (Coming Soon) Connect multiple Transmitters to a single Receiver to create a UHD 4k multi-view configuration.
- **UHD Videowall Capabilities*:** (Coming soon) Connect a single Transmitter to multiple Receivers to create and configure a UHD 4k videowall.
- **All communications between the Controller and the endpoints are secured (HTTPS).**

Neous Multi-Domain Matrix System Diagram



SPECIFICATION

MODEL NUMBER		MCK11EC-M
Core Processor		ARM Cortex A53 Quad-Core
RAM		2Gb
Fiber Optic Link Port		1x LC Single Mode, 1 Gbps
Solid State Drive		NVMe, 128Gb
Copper Link Port		1x RJ45, 1 Gbps
PORTS		
Video Ports		1x DP, 1x HDMI
Serial / RS-232		1x 4-pin Serial Terminal Block
USB		4x USB 2.0 Type A
PHYSICAL		
Dimensions		140x230x28mm / 5.5x9.1x1.1in
Weight		1.5kg / 3.3lb
POWER		
Power Requirements		12v DC
Power over Ethernet		Optional
AC Input		100 to 240 V AC
Power Type		External
ENVIRONMENTAL		
Operating Temperature		0°C to 40° C / 32°F to 104° F
Storage Temperature		-20°C to 60° C / -4°F to 140° F
Humidity		0%-80% RH, non-condensing
SOFTWARE		
Supported OS		Linux (Yocto-based)
GENERAL INFO		
Manufactured		TAA/BAA Compliant
Product Lifecycle		10 Years
Product Warranty		2 Years

ORDERING INFORMATION

MODEL NO.	P/N	DESCRIPTION	QTY
MCK11EC-M	CPN33989	Neous IP Matrix Controller	1
		Wall-Mounted 12v DC Power Supply	1